

In the Claims:

1 1. (currently amended) A method of resin-encapsulating an
2 electronic component mounted on a main surface of a board,
3 using a mold pair having an upper mold and a lower mold,
4 comprising the steps of:

5 attaching said board on said upper mold;

6 generating melted resin in a cavity provided in said
7 lower mold; mold by melting a solid resin material in said
8 cavity;

9 immersing said electronic component in said melted
10 resin in said cavity by closing said mold pair; and

11 forming a resin ~~[[mold]]~~ molded product including said
12 electronic component in a set resin by setting said melted
13 resin to produce said set resin in said cavity.

1 2. (currently amended) The method of resin encapsulation
2 according to claim 1, ~~wherein in~~ further comprising, before
3 said step of generating melted resin, said melted resin is
4 generated by heating a another step of placing said solid
5 resin material placed in said cavity.

1 3. (original) The method of resin encapsulation according to
2 claim 1, wherein
3 an electrode of said board and an electrode of said
4 electronic component are connected by a conductive material
5 forming a loop in a prescribed plane; and

in said step of immersing said electronic component in said melted resin, said prescribed plane moves substantially vertically to a main surface of said melted resin.

4. (original) A method of manufacturing a semiconductor device, using the method of resin encapsulation according to claim 1.

5. (original) A method of resin-encapsulating an electronic component mounted on a main surface of a board, using a mold pair having an upper mold and a lower mold and a solid resin material for resin encapsulation, comprising the steps of:

placing said board on said lower mold;

placing said resin material on a main surface of said board such that said resin material is not in contact with a conductive material connecting an electrode of said board with an electrode of said electronic component;

closing said mold pair;

generating melted resin on the main surface of said board and enclosing said electronic component in said melted resin by heating said resin material; and

forming a resin mold product by setting said melted resin.

1 6. (original) The method of resin encapsulation according to
2 claim 5, wherein

3 said resin material has such size and shape that
4 correspond to size and shape of said cavity; and

5 said melted resin is generated by heat transmitted
6 from said upper mold to said resin material.

1 7. (original) The method of resin encapsulation according to
2 claim 5, wherein

3 said resin material is formed such that a space formed
4 by said board and said resin material encloses said
5 electronic component, when said resin material is placed on
6 the main surface of said board; and

7 said space is set to have such a size that said resin
8 material is not in contact with the conductive material
9 connecting the electrode of said board with the electrode
10 of said electronic component.

1 8. (original) A method of manufacturing a semiconductor
2 device, using the method of resin encapsulation according
3 to claim 5.

1 9. (currently amended) A solid resin material consisting of a
2 solid resin material adapted, sized and shaped to be placed
3 in a mold cavity provided in a mold pair, and adapted to be
4 used as a raw material [[of]] for being melted in said

4597/WFF:ar

- 6 -

5 cavity to produce thereof a melted resin in a method of
6 resin-encapsulating an electronic component mounted on a
7 main surface of a board in said cavity by encapsulating
8 said electronic component in said melted resin and setting
9 said melted resin in said cavity, wherein said solid resin
10 material has generated in a cavity provided in a mold pair,
11 having such a size and a shape that correspond to a size
12 and a shape of said cavity.

1 10. (currently amended) The resin material according to
2 claim 9, formed adapted, sized and shaped such that a space
3 formed by said board and said resin material encloses said
4 electronic component, when said resin material is placed on
5 the main surface of said board; wherein said space is set
6 to have such a size that said resin material is not in
7 contact with ~~[[the]]~~ a conductive material connecting
8 ~~[[the]]~~ an electrode of said board with ~~[[the]]~~ an
9 electrode of said electronic component.

1 11. (original) The resin material according to claim 9, wherein
2 a notch is formed in said resin material.

1 12. (new) The resin material according to claim 9, being a
2 solid plate consisting of said solid resin material and
3 having a stepped sectional shape with stepped side walls.

1 13. (new) The method of resin encapsulation according to claim
2 1, wherein said step of placing said solid resin material
3 in said cavity comprises transporting and depositing said
4 solid resin material into said cavity using a
5 vacuum-holding conveyor.

[RESPONSE CONTINUES ON NEXT PAGE]

4597/WFF:ar

- 8 -